IN THE CLAIMS

1. (Canceled)

2. (Currently Amended) A method for forming a capacitor, comprising:

forming on a substrate assembly a conductive layer of a first material, the conductive layer having portions electrically isolated from one another;

forming a conformal metal layer of a second material atop the conductive layer wherein the ~~conductive layer is a different material than the metal layer~~ first material is different from the second material; and

forming a dielectric by electrically oxidizing at least a portion of the conformal metal layer [[.]] ;

forming a second metal layer over the dielectric; and

oxidizing at least a portion of the second metal layer to form a second dielectric.

3. (Previously Presented) The method as specified in Claim 2, further comprising forming a second conductive layer overlying the dielectric.

4. (Previously Presented) The method as specified in Claim 3, wherein forming the conductive layer comprises depositing a material to form the conductive layer.

5. (Previously Presented) The method as specified in Claim 2, further comprising forming the conformal metal layer from at least one of titanium, copper, gold, tungsten and nickel.

6. (Previously Presented) The method as specified in Claim 2, further comprising applying a potential across an electrolytic solution and the conformal metal layer to oxidize said conformal metal layer.

7-9. (Canceled)

10. (Currently Amended) A method for fabricating a capacitor on a wafer, comprising:

forming a metal layer overlying a conductive layer of a starting substrate, the conductive layer having portions electrically isolated from one another and the metal layer ~~being~~ having a ~~different~~ material ~~than~~ different from a material of the conductive layer; [[and]]

oxidizing the metal layer by applying a potential across an electrolytic solution and the metal layer thereby producing a metal oxide on the metal layer, the metal oxide constituting a capacitor dielectric, and an unoxidized portion of the metal layer and the conductive layer constituting a first capacitor plate [[.]] ;

forming a second metal layer over the capacitor dielectric; and

oxidizing at least a portion of the second metal layer to form a second capacitor dielectric.

11. (Currently Amended) A method of fabricating a capacitor on a wafer, comprising:

forming a metal layer of a first material overlying a first conductive layer of a second material formed on a starting substrate, the first conductive layer having portions electrically isolated from one another, and the metal layer ~~being~~ having a ~~different~~ material ~~than~~ different from a material of the first conductive layer;

contacting the metal layer with an electrolytic solution;

applying a potential across the electrolytic solution and the metal layer; and

oxidizing at least a portion of the metal layer in response to said applying to form an oxidized layer, of metal oxide, the metal oxide constituting a capacitor dielectric, and an unoxidized portion of the conformal metal layer and the conductive layer constituting a first capacitor plate [[.]] ;

forming a second metal layer over the capacitor dielectric; and

oxidizing at least a portion of the second metal layer to form a second capacitor dielectric.

12. (Previously Presented) The method as specified in Claim 11, wherein the first conductive layer includes polysilicon.

13. (Previously Presented) The method as specified in Claim 11, further comprising forming a second conductive layer overlying the oxidized layer.

14. (Previously Presented) The method as specified in Claim 11, wherein a non-oxidized portion of the metal layer and the first conductive layer form a conductive plate.

15. (Previously Presented) The method as specified in Claim 11, wherein applying the potential further comprises:

connecting a first electrode in contact with the electrolytic solution to a first terminal of a potential source; and

connecting the starting substrate to a second terminal of the potential source.

16. (Original) The method as specified in Claim 15, further comprising:

positioning a second electrode to contact the electrolytic solution; and

connecting the second electrode to the potential source.

17. (Original) The method as specified in Claim 11, further comprising the step of adjusting the potential across the electrolytic solution to control the oxidation of the metal layer.

18. (Original) The method as specified in Claim 17, further comprising:

monitoring a current in the electrolytic solution; and

adjusting the potential of the electrolytic solution to maintain a desired amount of the current.

19-28. (Canceled)

29. (Currently Amended) A method for forming a capacitor, comprising:

forming a first conductive layer of a first material, the first conductive layer having portions electrically isolated from one another;

forming a metal layer of titanium overlying the first conductive layer , the metal layer ~~being~~ having a ~~different~~ material ~~than~~ different from a material of the conductive layer ;

contacting the metal layer with an electrolytic solution;

applying a potential across the electrolytic solution and the metal layer; and

oxidizing at least a portion of the metal layer to form an oxidized layer of titanium-oxide in response to said applying, said oxidized layer forming at least a portion of a dielectric layer of the capacitor, and the first conductive layer forming a lower capacitor plate [[.]] ;

forming a second metal layer over the oxidized layer; and

oxidizing at least a portion of the second metal layer to form a second oxidized layer.

30. (Previously Presented) The method as specified in Claim 29, further comprising forming a second electrically conductive layer overlying the dielectric layer to form an upper capacitor plate.

31. (Canceled)

32. (Currently Amended) A method for forming a capacitor, comprising:

forming a conductive layer of a first material in contact with a starting substrate, the conductive layer having portions electrically isolated from one another;

forming a conformal metal layer of a second material overlying the conductive layer, the metal layer ~~being~~ having a ~~different~~ material ~~than~~ different from a material of the conductive layer;

contacting the metal conformal layer with an electrolytic solution;

applying a potential across the electrolytic solution and the conformal metal layer;

conducting current in the electrolytic solution in response to applying the potential;

[[and]]

oxidizing a portion of the conformal metal layer in contact with the electrolytic solution, to form a metal oxide in response to said conducting current, the metal oxide constituting a capacitor dielectric, and an unoxidized portion of the conformal metal layer and the conductive layer constituting a first capacitor plate[[.]] ;

forming a second metal layer over the metal oxide; and

oxidizing at least a portion of the second metal layer to form a second metal oxide.

33. (Previously Presented) The method as specified in Claim 32, further comprising:

forming a second capacitor plate overlying the capacitor dielectric.

34. (Currently Amended) A method for forming a capacitor, comprising:

forming a conductive layer of a first material in contact with a starting substrate, the conductive layer having portions electrically isolated from one another;

forming a conformal metal layer of a second material overlying the conductive layer;

contacting the metal conformal layer with an electrolytic solution;

applying a potential across the electrolytic solution and the conformal metal layer;

conducting current in the electrolytic solution in response to applying the potential;

oxidizing a portion of the conformal metal layer to form a metal oxide in response to said conducting current, the metal oxide constituting a capacitor dielectric, and an unoxidized portion of the conformal metal layer and the conductive layer constituting a first capacitor plate [[; and]] , wherein the conformal metal layer is an initial metal layer and wherein the electrolytic solution is an initial electrolytic solution and wherein the metal oxide is an initial metal oxide, and further comprising:

forming a further metal layer to overlying the initial metal oxide;

contacting the further metal layer with a further electrolytic solution;

applying a potential across the further electrolytic solution and the further metal layer;

conducting current in the further electrolytic solution in response to said applying a potential across the further electrolytic solution; and

oxidizing, in response to said step of conducting current in the further electrolytic solution, at least a portion of the further metal layer to form a further metal oxide, the further metal oxide forming a further portion of the capacitor dielectric.

35. (Previously Presented) The method as specified in Claim 34, further comprising:
forming a second capacitor plate overlying the capacitor dielectric.

36. (Original) The method as specified in Claim 34, wherein the further electrolytic solution and the initial electrolytic solution are the same solution.

37. (Currently Amended) A method for forming a capacitor, comprising:
forming an insulative layer overlying a substrate;
masking the insulative layer to define a region in which to fabricate the capacitor;
removing the insulative layer in an unmasked region to expose the substrate;
depositing a polysilicon layer overlying the insulative layer and the substrate and contacting the substrate;
removing portions of the polysilicon layer to expose the insulative layer;
chemical vapor depositing a metal layer to overlie the polysilicon layer and the insulative layer;
contacting the metal layer with an electrolytic solution;
applying an electrical potential to the electrolytic solution and the metal layer; [[and]]
oxidizing, in response to said applying, at least a portion of the metal layer to form a metal oxide to function as a dielectric layer[[.]] ;
forming a second metal layer over the metal oxide; and
oxidizing at least a portion of the second metal layer to form a second metal oxide.

38. (Previously Presented) The method as specified in Claim 37, further comprising:
forming a conductive layer overlying the metal oxide layer.

39-49. (Canceled)

50. (Previously Presented) The method of claim 38, wherein the metal layer includes titanium.

51. (Previously Presented) The method as specified in Claim 38, wherein the metal layer includes at least one of titanium, copper, gold, tungsten and nickel.

52. (Previously Presented) The method as specified in Claim 51, wherein the conductive layer includes polysilicon.

53-75. (Canceled)

76. (Currently Amended) A method of forming a capacitor, comprising:

forming a polysilicon layer overlying a substrate, the polysilicon layer having portions electrically isolated from one another;

forming a conformal metal layer atop the portions of the polysilicon layer ~~which serves in part as the capacitor bottom plate~~;

electrolytically oxidizing at least a portion of the conformal metal layer to form an oxidized portion which serves as the capacitor dielectric; [[and]]

covering the oxidized portion with a conductive layer ~~which serves as the capacitor top plate~~;

electrolytically oxidizing at least a portion of the conductive layer to form a second dielectric oxidized portion; and

covering the second dielectric with a second conductive layer.

77. (Previously Presented) The method as specified in claim 76, wherein forming the conformal metal layer includes depositing one of titanium, copper, gold, tungsten and nickel.